

6 UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

The proposed action analyzed in this EIS is the construction and operation of two transmission lines in Imperial County, California, that would transmit power generated at two facilities in Mexico to the United States power grid. The construction and operation of the transmission lines and the operation of the plants that would supply them would result in some unavoidable adverse environmental impacts in the United States. This section describes these impacts.

6.1 NOISE

During construction, daytime noise would increase in areas located near the ROWs. There are no residences in these areas, and recreational use is limited. Since this impact is associated with the construction phase only, it would be temporary and short-term. During dry weather conditions (which are usual in the study area), noise associated with corona effects would not be audible beyond the ROWs. During very infrequent rainfall events, the noise level at the edge of the ROWs would be less than 39 dBA. This is a low level (typical of the noise level in a library), which would not be expected to create a disturbance.

6.2 SOILS

The transmission line construction process would unavoidably have some effects on soil resources. Soils would be disturbed during the construction of towers, monopoles, and access roads. The construction of footings for towers and monopoles would result in the permanent displacement of soils. Removal of vegetation and compaction would occur in the work areas, with potential impacts on erosion. Soil displacement and compaction would occur during the grading and use of access roads. These impacts would occur on each of the alternative routes. However, construction of the western and eastern alternative routes would result in more disturbance than construction of the proposed routes. They would be longer and would require the construction of more towers than the proposed routes, and all new access roads would have to be graded, whereas the proposed routes would make use of existing roads. None of the routes analyzed would cross cultivated land, though it is likely that the lower portion of the western alternative routes would cross prime farmland soils.

6.3 WATER RESOURCES

Using wet cooling during operation of the two power plants in Mexico would unavoidably consume water that would otherwise flow into the New River. This would reduce the flow of water in the New River as it enters the United States, and the flow of the New River into the Salton Sea. Reduced flows would result in lower water levels in both the New River and the Salton Sea, making the New River narrower and the Salton Sea smaller in area. The water treatment facilities associated with the power plants would beneficially remove many impurities from wastewater that would otherwise flow directly into the New River. However, because of the

reduction in water volume associated with plant operation, there still would be increases in salinity and in the concentration of selenium in the New River, the Brawley wetlands that draw from the New River, and the Salton Sea. These increased concentrations would have small but adverse effects. Even with increased salinity, the concentration of TDS in the New River would remain less than the water quality objective for the Colorado River Basin.

Each transmission line would require the placement of two lattice towers within the 100-year floodplain at Pinto Wash. Because of their open structure and location on the very edge of the floodplain, only minor amounts of the floodplain would be disturbed (Section 4.2.4.2) with little if any affect on flood levels.

6.4 AIR QUALITY

The transmission line construction phase of the project, the operation and maintenance of the transmission lines, and the operation of the Termoeléctrica de Mexicali (TDM) and La Rosita Power Complex (LRPC) power plants in Mexico would affect air quality in the United States. Impacts from construction would include fugitive dust emissions generated by the operation of construction vehicles and the downwash from helicopters used in tower placement. Fugitive dust would be concentrated in the immediate vicinity of the transmission lines and would be of short duration. It is not expected to materially affect ambient PM₁₀ levels in the region of the projects. There would also be exhaust emissions from construction vehicles. Given the small number of vehicles involved, the relatively short duration of construction, and the distance of the construction sites from populated areas, no substantial effect on air quality is expected.

The operation and maintenance of the transmission lines would likewise result in the emission of small quantities of dust and exhaust emissions. The emissions resulting from the relatively infrequent trips required for line maintenance would add little to similar emissions generated by Border Patrol vehicles in the area. Corona effects from the operation of the transmission lines could result in amounts of O₃ and would be a minor contributor to ambient air pollution.

The Mexico power plants' stack emissions would include NO_x, CO, CO₂, NH₃, and PM₁₀. Cooling towers at the plants would also emit small amounts of PM₁₀. Secondary formation of O₃ and PM₁₀ could result from the interaction of stack emissions with other substances in the atmosphere or plume. The Imperial Valley is a nonattainment area for PM₁₀ and O₃, thus these two pollutants are of most concern. The amount of any O₃ that could be produced due to the operation of the two plants and expected to reach the maximum U.S. receptor point is so small it would be indistinguishable from ambient background levels. PM₁₀ and other criteria pollutants are expected to be below EPA significance levels in the United States. CO₂ emissions are expected to be very small and an insignificant contributor to global warming. Mitigation procedures have been proposed that would further reduce stack emissions and PM₁₀ production.

6.5 BIOLOGICAL RESOURCES

All of the transmission line routes analyzed in this EIS pass through the Yuha Basin ACEC and the Yuha Basin Management Area for the flat-tailed horned lizard. A limited amount of Sonoran creosote bush scrub and desert wash natural habitat would unavoidably be destroyed by the construction of the towers, poles, crossing structures, and new access roads under each transmission line route. Some habitat for the flat-tailed horned lizard and burrows of the western burrowing owl (BLM-designated species of concern) could be lost. However, the implementation of mitigation procedures for these species during the construction phase would minimize the potential for individuals being killed. Nevertheless, some plant species considered sensitive by the California Native Plant Society could be disturbed. Both the western and eastern alternative transmission line routes would increase the number of routes into the ACEC and the Yuha Basin Management Area, thereby increasing the potential for human disturbance. Disturbance is likely to result both from the use of access roads for line maintenance and as the result of unauthorized recreational use of the roads. In general, the amount of unavoidable disturbance of biological resources would be less for the proposed routes than for either the western or eastern alternative routes, because they would be shorter, require fewer towers, require less new road construction, and provide no new access to the ACEC and the Yuha Basin Management Area.

6.6 CULTURAL RESOURCES

The proposed transmission line routes would require the construction of lattice towers within the boundaries of four archaeological sites deemed eligible for inclusion in the NRHP by the California SHPO, resulting in the unavoidable destruction of portions of these sites. However, the SHPO has approved plans for the mitigation of any adverse effects resulting from this action.

Neither the western nor eastern alternative routes have been completely surveyed for cultural resources. However, each avoids the shoreline of ancient Lake Cahuilla, and archaeological site density along these routes is expected to be lower. Lower site density would make it easier to avoid archaeological sites when placing towers and roads. However, even along the alternative routes it is possible that some archeological sites could not be avoided and would have to be mitigated by other means that unavoidably would result in the removal of all or portions of some sites.

6.7 VISUAL RESOURCES

There are no residences and little recreational activity within the area of the projects. The most significant visual impacts of the transmission lines would occur to drivers along State Route 98. Because of the existing SDG&E line paralleling the proposed routes and the lattice tower structures that allow natural light and background elements to show through, the existing character of the landscape would be partially retained. Any visual impact from construction of the new lines along the proposed routes is expected to be moderate. Transmission lines along the

alternative routes would diverge from the existing line the most in the area south of State Route 98. This area is largely uninhabited and receives little recreational use; therefore, the visual impacts of the construction of transmission lines, although greater than along the proposed routes, would still be moderate.